

CLAIMS

1 - 33. (Canceled).

34. (Previously presented) An actuator housing comprising:

a pair of flanges cooperatively arranged to form the actuator housing, each flange being coated with a resin-containing coating composition, and;

an actuator diaphragm compressively retained between the flanges, the actuator diaphragm having a rubber composition which comprises a copolymer rubber that is a copolymer of an unsaturated nitrile and a conjugated diene proportioned in a range of 10 to 45 parts by weight unsaturated nitrile to 55 to 90 parts by weight conjugated diene, a plasticizer for the copolymer rubber in an amount of 1 to 30 parts by weight plasticizer per hundred parts by weight of the copolymer rubber, a silica filler in an amount of about 10 to about 80 parts by weight silica per hundred parts by weight of the copolymer rubber, a coupling agent in an amount from 0.1 to 20 parts per hundred weight of copolymer rubber, and a vulcanizing agent for the copolymer rubber in an amount of about 0.01 to about 10 parts per hundred weight of the copolymer rubber, held under sufficient compression to produce a bond between the plasticizer in the diaphragm and the resin-containing coating composition on the flanges for increased retention of the actuator diaphragm between the flanges.

35. (Previously presented) The actuator housing in accordance with claim 34, wherein the unsaturated nitrile of the rubber composition is selected from the group consisting of acrylonitrile, methyl acrylonitrile, and mixtures thereof; and the conjugated diene of the rubber composition is selected from the group consisting of 1,3-butadiene, isoprene, 1,3-pentadiene, and mixtures thereof.

36. (Previously presented) The actuator housing in accordance with claim 34, wherein the actuator diaphragm comprises a fabric-reinforced rubber article formed by encasing a fabric layer, in woven or non-woven form, between two sheets of the rubber composition, followed by compressing the rubber sheets together at a temperature sufficient to vulcanize said rubber sheets together surrounding the fabric layer.

37. (Previously presented) The actuator housing in accordance with claim 36, wherein the fabric layer is a woven fabric.

38. (Previously presented) The actuator housing in accordance with claim 37, wherein the woven fabric is selected from the group consisting of nylon, polyaramide, polyester, silk, cotton and a combination thereof.

39. (Previously presented) The actuator housing in accordance with claim 38, wherein the fabric is woven from nylon 6,6.

40. (Previously presented) An actuator housing in accordance with claim 34, wherein the resin-containing coating composition comprises a polymer or copolymer selected from the group consisting of a polyester, polyether, polyacrylic, polyurethane, latex, alkyd, epoxy, or combination thereof.

41. (Previously presented) An actuator housing in accordance with claim 40, wherein the resin-containing coating composition is selected from the group consisting of a polyurethane, polyethylene terephthalate, polybutylene terephthalate, an alkyd resin, and an epoxy resin.